

WHAT IS CLAIMED IS:

1. An electro-optical device, comprising:
 a substrate;
 a plurality of scanning lines provide on the substrate;
 a plurality of data lines crossing the plurality of scanning lines;
 a plurality of transistors formed with gate electrodes having ends in a gate-width direction and ends in a gate-length direction, each transistor being connected to one of the scanning lines and one of the data lines; and pixel electrodes connected to the transistors,
 at least one portion of the ends in the gate-width direction of the gate electrodes forming the transistors being disposed in a semiconductor region forming the transistor, and the ends in the gate-length direction of each of the gate electrodes extending outside of the semiconductor region forming the transistor.

2. The electro-optical device according to claim 1, a semiconductor layer forming the transistor comprising monocrystalline silicon.

3. The electro-optical device according to claim 1, a semiconductor layer forming the transistor comprising polycrystalline silicon.

4. The electro-optical device according to claim 1, the substrate being an insulative substance.

5. The electro-optical device according to claim 1, the substrate being a quartz substrate.

6. The electro-optical device according to claim 1, the substrate being a glass substrate.

7. The electro-optical device according to claim 1, the substrate being a first substrate provided with semiconductor layers, the electro-optical device further comprising:

a second substrate disposed opposing a surface of the first substrate;
 and

liquid crystals sandwiched by the first substrate and the second substrate, and driven by transistor elements formed on the semiconductor layers.

8. An electronic equipment, comprising:
 a light source;

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the electro-optical device according to claim 1 that modulates, in accordance with image information, incident light emitted by the light source; and a projection system that projects the light modulated by the electro-optical device.

- 5 9. An electro-optical device, comprising:
 a substrate;
 a plurality of scanning lines provided on the substrate;
 a plurality of data lines crossing the plurality of scanning lines;
 a plurality of transistors formed with gate electrodes having ends in a
10 gate-width direction and ends in a gate-length direction, each transistor being
connected to one of the scanning lines and one of the data lines; and
 pixel electrodes connected to the transistors,
 at least one portion of the ends in the gate-width direction of each of
gate electrodes forming the transistors being disposed in a semiconductor region
15 forming the transistor, the ends in the gate-length direction of each of the gate
electrodes extending outside of the semiconductor region forming the transistor, and
at least one of the ends in the gate-width direction of a channel region of each
transistor being electrically connectable.
- 20 10. The electro-optical device according to claim 9, further comprising a
capacitance line to be electrically connected to the channel region of each transistor.
11. The electro-optical device according to claim 9, the transistors being P-
channel transistors that supply power potential to capacitance lines electrically
connected to channel regions of the P-channel transistors.
- 25 12. The electro-optical device according to claim 9, the transistors being
N-channel transistors that supply power potential to capacitance lines electrically
connected to channel regions of the N-channel transistors.
13. The electro-optical device according to claim 9, a semiconductor layer
forming the transistors comprising monocrystalline silicon.
- 30 14. The electro-optical device according to claim 9, a semiconductor layer
forming the transistors comprising polycrystalline silicon.
15. The electro-optical device according to claim 9, the substrate being an
insulative substance.

16. The electro-optical device according to claim 9, the substrate being a quartz substrate.

17. The electro-optical device according to claim 9, the substrate being a glass substrate.

5 18. The electro-optical device according to claim 9, the substrate being a first substrate provided with semiconductor layers, the electro-optical device further comprising:

a second substrate disposed opposing a surface of the first substrate;
and

10 liquid crystals sandwiched by the first substrate and the second substrate and driven by transistor elements formed on the semiconductor layers.

19. An electronic equipment, comprising:
a light source;
the electro-optical device according to claim 9 that modulates, in
15 accordance with image information, incident light emitted by the light source; and
a projection system that projects the light modulated by the electro-optical device.

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